

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A method for producing a catalytically active layered silicate, with silicates, with one or more intercalated layers, comprising:

[[~~-~~]] ~~wherein~~ (1) adding a metal solution is added to the to a layered silicate ~~[[~~(3.1)~~]]~~
to form a mixture;

~~and then~~ (2) drying the mixture is dried to generate the metal atom pillars that support
the respective intercalated layers, to obtain a dry substance; layer ~~(4.1),~~

[[~~-~~]] ~~wherein a~~ (3) dry-mixing a transition metal salt where the transition metal is
selected from the group consisting of copper, titanium, indium, cerium, and lanthanum is
further added to the with the dry substance obtained in (2) such a way to generate a dry
mixture ~~[[~~(5.1),]];~~~~ and

[[~~-~~]] ~~wherein~~ (4) shock-heating the dry mixture obtained in (3) is finally heated, so
that the metal atoms or at a heating rate of about 100°C/10 min or greater to disperse the
transition metal atoms become included in into the intercalated layer to achieve a
homogeneous distribution of dehydrated metal atom pillars in the intercalated layers ~~(6.1) and~~
~~the dry mixture is to simultaneously calcined calcinate the dry mixture.~~

Claim 2 (Currently Amended): The method according to claim 1, wherein the metal
solution is an Al, Ti, Fe, Cu, or Cr solution or a polyoxide mixture of these or similar metals
is used as the metal solution.

Claim 3 (Currently Amended): The method according to claim 1, wherein the dry
mixture of (3) is heated to values a temperature of higher than 300°C.

Claim 4 (Currently Amended): The method according to claim 1, ~~wherein~~ further comprising:

washing the mixture of layered silicate and metal solution of (1) ~~is first washed,~~
filtering said mixture, and
heating said mixture ~~then filtered and only thereafter heated slowly,~~ whereupon the ~~reaction of~~ formation of the metal atom pillars ~~takes place~~ spontaneously occurs at room temperature.

Claims 5-6 (Canceled).

Claim 7 (Currently Amended): The method according to claim 1, ~~wherein~~ further comprising: ~~after formation of the metal atom pillars in the intercalated layers,~~

processing the layered silicate ~~is processed~~ by an acid treatment to a cationic condition or by an alkaline treatment to an anionic condition,
washing the layered silicate, and
drying the layered silicate after formation of the metal atom pillars in the intercalated layers ~~then is washed and dried.~~

Claim 8 (Canceled).

Claim 9 (Currently Amended): The method according to claim ~~[[8]]~~ 1, wherein the transition metal salt is copper nitrate or copper sulfate.

Claim 10 (Currently Amended): The method according to claim 1, ~~wherein the~~
further comprising

shaping the substance resulting from the dry mixture ~~is shaped~~ to form a shaped
product ~~product, optionally with addition of a binder.~~

Claim 11 (Currently Amended): The method according to claim 10, ~~wherein the~~
further comprising drying the shaped product ~~is dried.~~

Claim 12 (Currently Amended): The method according to claim 1, wherein the
layered silicate is a two-layer mineral, and/or a three-layer mineral, or a four-layer mineral ~~is~~
~~used as the layered silicate.~~

Claim 13 (Currently Amended): The method according to claim 1, wherein ~~the~~
~~internal surface of the produced~~ the layered silicate has an internal surface value of at least
300 m²/g ~~has values of approximately 300 m²/g and larger.~~

Claim 14 (Currently Amended): The method according to claim 1, wherein the
catalytically active layered silicates are nanoscale composite layered silicates ~~silicates~~,
~~especially Al-pillared and/or Ti-pillared clays.~~

Claim 15 (Previously Presented): The method according to claim 1, wherein the
metal solution is a polycationic metal solution.

Claim 16 (Currently Amended): The method according to claim 1, wherein the dry
mixture of (3) is heated to ~~values between~~ a temperature ranging from 450°C and to 700°C.

Claim 17 (Currently Amended): The method according to claim 5, wherein the ~~temperature gradient~~ heating rate for the shock-heating ~~step of (4)~~ is adjusted from 100°C to 500°C in 30 minutes.

Claim 18 (Currently Amended): The method according to claim 10, ~~wherein the~~ further comprising
shaping the substance resulting from the dry mixture ~~is shaped in the course of~~ during
an extrusion operation.

Claim 19 (Currently Amended): The method according to claim 10, further
comprising
adding a binder ~~wherein said binder is aluminum oxide.~~

Claim 20 (New): The method according to claim 1, wherein the metal solution is a mixture of Al, Ti, Fe, Cu, or Cr polyoxide solutions.

Claim 21 (New): The method according to claim 12, wherein the two-layer mineral is kaolinite or an aluminosilicate.

Claim 22 (New): The method according to claim 12, wherein the three-layer mineral is montmorillonite or bentonite.

Claim 23 (New): The method according to claim 14, wherein the catalytically active layered silicate is a Al-pillared clay, a Ti-pillared clay, or a combination thereof.

Claim 24 (New): The method according to claim 19, wherein the binder is aluminum oxide.